T F M 100G2

ULTRA MINIATURE
TRIAXIAL FLUXGATE MAGNETOMETER

July 2005 SPECIFICATIONS

Ultra Miniature Triaxial Fluxgate Magnetometer for spacecraft attitude control, general magnetic measurements in the laboratory or field applications such as remotely piloted vehicles, data buoys, sounding rockets, etc. This instrument is designed for the highest reliability and uses no fuses, potentiometers or switches.

Axial Alignment :	Orthogonality better than ± 1°
Input Voltage Options :	15 to 34 VDC @ 25mA
Field Measurement Range Options :	± 100 μ T = ± 10V
Accuracy :	± 0.75% of full scale (0.5% typical)
Linearity :	± 0.015% of full scale
Sensitivity :	100 μV/nT
Scale Factor Temperature Shift :	0.007% full scale/ ° Celsius
Noise :	≤12 picoTesla RMS/ Hz @1 Hz (≤8pT option)
Output Ripple :	3 millivolt peak to peak @ 2nd harmonic
Analog Output @ Zero Field :	± 0.025 Volt
Zero Shift with Temperature :	± 0.6 nT/° Celsius
Susceptibility to Perming :	± 8 nT shift with ± 5 Gauss applied
Output Impedance :	332 Ω ± 5%
Frequency Response :	3 dB @ > 500 Hz (to > 4 KHz wideband)
Over Load Recovery :	± 5 Gauss slew < 2 milliseconds
E M I :	Designed to meet CEO1, CEO3, REO2, CS01, CSO2, CSO6, RSO1, RSO2, RS03
Random Vibration :	> 20G RMS 20 Hz to 2 KHz
Temperature Range :	- 55° to + 85° Celsius operating
Acceleration :	> 60G
Weight; Size :	100 grams; 3.51 cm x 3.23 cm x 8.26 cm
Connector :	Chassis mounted 9 pin male "D" type; mating connector supplied